

James Scott Appointed Director of Special Projects at Sandia

James H. Scott has been appointed Director of Special Projects 9200, effective Sept. 1, a position that will be vacated by the transfer of Don B. Shuster to Director of Advanced Systems Development 5600 on that same date.

Mr. Scott has been manager of Advanced Systems Development 5610 since August

A Sandia employee since May 1961, Mr. Scott was engaged in full scale nuclear weapons testing in Nevada and the Pacific for his first six years with the Laboratory. During that period he was promoted to division supervisor and served as the Sandia test group director of the 1957 Plumbbob nuclear test series in Nevada.

Mr. Scott was named division supervisor of a systems engineering division later that same year and worked in that capacity until he was transferred to Cape Kennedy in 1959. He returned to the Laboratory in January 1960 to head a division designing high altitude nuclear detection systems. Nine months later he was promoted to manager of Instrumentation Projects Department. In 1962 he was Sandia deputy commander of high altitude operations for the Dominic test series.

Before joining Sandia, Mr. Scott was an electrical engineer with Holmes and Narver, Inc., in Los Angeles for approximately six months.

He received his BS degree in electrical engineering from the University of Washington in June 1950. Earlier he attended an electronic technicians school during a year in the Navy.

He is a member of Tau Beta Pi, Phi Beta Kappa, and Sigma Xi.

125 Sandians Participating

JTF-8 Safeguard Exercise to Start In Mid-September in Pacific Area

A joint Department of Defense-Atomic Energy Commission non-nuclear safeguard exercise, similar to that of November 1965, will be conducted by Joint Task Force Eight in the Pacific area from mid-September through mid-October.

As in the 1965 exercise, B-52 aircraft will drop instrumented test-simulators while other aircraft in the drop areas simulate gathering nuclear effects data. Several instruments and test simulator-equipped rockets will be launched from Johnston Atoll and from a Navy ship as part of the exercise. No nuclear weapons are involved in any part of this entire practice exercise.

Approximately 125 Sandia Laboratory personnel will take part in the test readiness exercise. The group will be headed by H. E. Viney, manager of Sandia's Nuclear Test Department 7250, serving as acting commander, Task Group 8.1.4.

Project officers from Sandia include: A. B. Cole (7256), test vehicles and operations; A. F. Huters (7255), diagnostic aircraft operations; J. E. Stiegler (7251), systems engineering and coordination; C. L. Gomel (7261), staff administration; W. R. Hoagland (1544), firing and fusing safety; and W. H. Kingsley (3310), radiological safety.

M. L. Kramm, manager of Sandia's Upper Atmosphere Projects Department 9220, will be in charge of rocket launching opera-

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LAB NEWS

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Airborne Laboratory Will Race with Moon's Shadow During Eclipse Study

Sandians will be in the shadow of the moon this fall during a study of a total eclipse of the sun.

They will be flying, with other scientists, aboard diagnostic aircraft some 33,500 feet above the South Atlantic, near the Brazilian coast.

Sandians participated in a similar eclipse study conducted in the South Pacific in May 1965.

Scientific instruments to measure a variety of solar phenomena were recently fitted in the NC-135A flying laboratory at Kirtland AFB for a preliminary checkout

mission. The equipment will be installed late this fall before the expedition heads for Buenos Aires, Brazil, for the Nov. 12

The Sandia group aboard the high-flying jet aircraft will take a variety of measurements, mainly of the sun's corona, during the eclipse which provides scientists with an opportunity of observing solar features usually masked by the brilliance of the sun.

Flying above clouds, water vapor, and dust which often obscure the sun at sea level, the airborne laboratory will then race along with the moving shadow as it speeds across the South Atlantic Ocean.

While the duration of ground totality is less than two minutes, the 500-mph speed of the aircraft will enable airborne scientists to conduct their experiments for about three minutes. The value of this extra minute becomes more apparent when we realize that during the past 100 years there has been a total of only 100 minutes of "observation" time.

Many experiments aboard the Sandia aircraft are designed to study the sun's corona, the tenuous envelope of radiation

BRAZIL

BRAZIL

SRIO Grande

Montevideo

ARGENTINA

ATLANTIC OCEAN

ROUTE of the Sandia flying laboratory during solar eclipse study.

gas that surrounds the sun itself. Other experiments are to gather data on the interactions of the solar emanations with the earth's upper atmosphere.

During the flight to the base of operations for the eclipse study and on the return flight, via Lima, Peru, cosmic ray studies will be conducted by J. E. Keith (5234). Cosmic rays are sub-atomic bits of matter that continually bombard the earth's atmosphere from outer space.

Along with Sandia personnel, there will be other experimenters aboard the aircraft from the Naval Ordnance Test Station (NOTS), and the Geophysical Corporation of America (GCA).

Two other specially instrumented NC-135A aircraft, which normally operate out of Kirtland AFB and are supplied by the Atomic Energy Commission and U. S. Air Force, will also participate in the eclipse expedition. Aboard will be experimenters from Los Alamos Scientific Laboratory and Lawrence Radiation Laboratory. Sandia will have one experiment on board the LASL aircraft. All three planes will be based at Buenos Aires.

Other U.S. aircraft participating in the eclipse study include an Air Force Cambridge Laboratories KC-135 and a Convair 990 flown by the National Aeronautics and Space Administration.

All of the aircraft will be over the Atlantic Ocean at the time of totality in the vicinity of 34 degrees, 40 minutes South latitude and 49 degrees, 30 minutes West longitude, which is southeast of Rio Grande, Brazil.

M. M. Robertson (1122) is scientific commander of the Sandia aircraft and J. A. Williams (7255) is the aircraft mission coordinator. C. A. Blossom (2554) is in charge of logistics support and Wayne Hancock (3465) will handle documentary photography.

C. A. Nelson (7255) will man a trans-(Continued on Page Two)

IEEE Region 6 Achievement Award Presented to Charles W. Harrison

The 1966 IEEE Region Six Electronic Achievement Award was presented to Charles W. Harrison, Jr., (1425) during the WESCON Keynote Luncheon in Los Angeles Aug. 23. He is the first Sandian and New Mexican so honored.

The Western Electronics Show and Convention (WESCON) is sponsored yearly by the Institute of Electrical and Electronics Engineers (IEEE). Region Six is comprised of some 30,000 members and the award is given for outstanding professional accomplishment within this region.

Mr. Harrison's selection was in "recognition for your numerous contributions to antenna theory, your recent work in applying the principles of electrodynamics to the solution of problems in the nuclear weapon and missile development programs, and for your technical administration of electronics projects in the United States Navy."

Keynote speaker during the luncheon was Glenn T. Seaborg, chairman of the Atomic Energy Commission.

The award was originated in 1952 and since that time the recipients have included representatives from universities and industry.

Mr. Harrison joined Sandia in 1957 as an applied physicist following his retirement from the U.S. Navy as a Commander. He received a BS degree in engineering in 1939 and the degree of electrical engineer in 1940, both from the University of Virginia. In 1942 he was graduated with the SM degree in communication engineering from Harvard, and also received his ME and PhD degrees in applied physics from the same school in 1952 and 1954, respectively.

Mr. Harrison has published some 150 technical papers and attributed his selection for the award primarily upon reports and published papers which have been prepared while on the Sandia Laboratory staff.

"George Rodgers, manager of Electronic Systems Department 1420, was responsible for suggesting at least 75 percent of the applied research I have completed," he



said, "and Charles S. Williams, my division supervisor, was the first to suggest and apply transform theory to problems in electromagnetic theory using digital computers, which opened an entirely new field for investigation."

Theoretical problems were also suggested by T. B. Cook, Jr. (5200), T. L. Pace (7210), and others. R. W. P. King of Harvard University, a Sandia consultant, was an advisor to Mr. Harrison on some phases of the work.

"Many of the investigations would have been impossible to carry out without the services of Eugene A. Aronson (5263), my computer programmer," Mr. Harrison said. "I would also like to thank the secretaries and curve plotters who have helped."

tions at Johnston Atoll. The rockets carry test simulator equipment.

Part of Sandia's personnel will be assigned to ground and ship operations and others will be aboard one of the three NC-135A diagnostic aircraft. The planes will conduct operations in the drop areas to simulate the gathering of nuclear effects

The Joint Task Force Eight, comprised of Department of Defense and Atomic Energy Commission personnel, is the organization responsible for maintaining our nation's readiness to perform testing in the environments now prohibited by the limited nuclear test ban treaty. The Administration informed the Senate that this test readiness capability would be maintained when it submitted the limited nuclear test ban treaty for approval in 1963.

All such exercises are designed to help maintain facilities, resources, and personnel proficiency in a state of readiness to begin promptly nuclear tests in the atmosphere, if ever required. The United States earnestly hopes that the limited nuclear test ban treaty will never be abrogated, and that its atmospheric nuclear testing capability will never have to be used. It is nonetheless essential that such a capability be maintained, in the interest of national security.



Editorial Comment

More than 85,000 school children start attending school next week.

School buses will be a common sight again - stopping to pick-up or discharge passengers. Little passengers who, after getting off, may dart across the street in front of or from behind the bus.

Morning, noon, and after school, children will fill our streets. They may be running to have some time on the schoolyard swings before classes begin. They may be rushing home for lunch. Or they may be hurrying to watch a TV show or change into play clothes after a hard day in the classroom.

Most of them have bright and happy smiles. All of them are young. Each of them has some of the innocence of child-

Please don't hurt them. Drive carefully.

Sandia Authors

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- G. A. Samara (5132), "The Effects of Hydrostatic Pressure to 20 kbar on the Dielectric Constant of Rubidium Chloride," June issue, SOLID STATE COMMUNICA-
- J. A. Corll and G. A. Samara (both 5132), "Search to 25 kbar for a Transition in Sodium Chloride," June issue, SOLID STATE COMMUNICATIONS.
- D. M. Hull (1311), "Combination Laser-Q Switch Spinning Reflector and Saturable Dye," August issue, JOURNAL OF AP-PLIED OPTICS.
- W. W. Allison (3211), "Value Analysis Applied to Safety Engineering," June issue, JOURNAL OF THE AMERICAN SOCIETY OF SAFETY ENGINEERS.
- R. G. Dosch (1121), "Separation of Mercury-Thallium Mixtures," June issue, ANALYTICAL CHEMISTRY.
- E. C. Cnare (5141), "Magnetic Flux Compression by Magnetically Imploded Metallic Foils," September issue, JOURNAL OF APPLIED PHYSICS.
- D. H. Anderson (5132), "Evidence for a Negative Conduction Electron Contribution to Hyperfine Fields in Iron, Cobalt and Nickel from Pressure Dependence Experi-

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- T. L. Bratcher (9424), "A Bayesian Approach to the Problem of Ranking Probabilities," September issue, JOURNAL OF THE SOCIETY FOR INDUSTRIAL AND APPLIED MATHEMATICS.
- L. J. Vortman (5232), "Air-Blast Suppression as a Function of Explosive Charge Burial Depth," July issue, JOURNAL OF THE ACOUSTICAL SOCIETY OF AMER-

Ross Yingst (2423), "Curve Tracer Adapter Circuit Produces FET Id V. Vgs Characteristics for Use in Determining Zero Temperature Coefficient Bias Point,' July 19 issue, ELECTRONIC DESIGN.

G. C. McDonald (5590), "Nuclear Electrical Power for Canal Construction," August issue, MECHANICAL ENGINEER-

R.W.P. King (Sandia consultant), C. W. Harrison, Jr. (1425), and E. A. Aronson (5263), "The Imperfectly ConductingTransmitting Antenna: Numerical Results," September issue, IEEE TRANS-ACTIONS ON ANTENNAS AND PROPA-GATION

Sandian Contributes to Mass Spectrometric Book

A chapter written by James W. Guthrie (1415) is included in the recently-published book, "Mass Spectrometric Analysis of Solids."

The book was edited by Arthur J Ahearn, a member of the Bell Telephone Laboratories' technical staff at Murray Hill, N. J., and other contributors were R. E. Honig of RCA Laboratories, E. B. Owens of Lincoln Laboratory, MIT, and W. M. Hickam and G. G. Sweeney, both of Westinghouse Research Laboratories. Each is actively engaged in working with the particular technique they have written about.

In the preface, Mr. Ahearn noted: "The great increase in solid state physics after 1945 stimulated the development of new analytical techniques for the determination of the chemical composition of materials. The purpose of this book is to describe one of these - a mass spectrometric technique."

Mr. Guthrie has been at Sandia nearly seven years and was assigned until recently to Physics and Technology Division 1413. His previous employment was with Dow Chemical at Rocky Flats, Colo., and Phillips Petroleum at Phillips, Tex. He has a BS degree in chemistry from West Texas State and has done graduate study at the University of Colorado.

The new book was published by the Elsevier Publishing Company of Amsterdam, London, and New York City.

Sandian Chairs Meeting of Civil Defense Group in Albuquerque

The initial meeting of the Subcommittee on Blast and Thermal Effects of the National Academy of Science's Advisory Committee on Civil Defense was held Aug. 25 and 26 in Albuquerque.

Local members include Chairman L. J. Vortman (5232), C. R. Mehl (5231), and Dr. Clayton S. White, president-director, Lovelace Foundation for Medical Education and Research.

The civil defense committee was established in 1955 and since that time much of the responsibility has been assigned to subcommittees. Last December the subcommittees were reorganized to provide better coverage in technical areas of the civil defense program.

Among the purposes for which the blast and thermal effects group was created are the development of technology for estimating inherent protection capability of structures and providing data for shelter design.

The initial meeting of the group dealt with these objectives, plus research and development programs on blast, thermal, and fire effects being conducted by or for the Office of Civil Defense. Plans and procedures for the subcommittees were also discussed.

In serving as chairman of the new subcommittee, Mr. Vortman relinquished chairmanship of the Subcommittee on Protective Structures. It was during his tenure as chairman that an international symposium was sponsored by the subcommittee which resulted in the recent Academy publication, "Protective Structures for Civilian Population," based upon presentations made a year ago in Washington,

Continued from Page One . . .

Sandia Eclipse Expedition

ponder station at Rio Grande, Brazil, which will provide a navigational fix for the aircraft. Aircraft support operations are coordinated by Weldon Johnson of General Dynamics.

J. B. Wade (7224) assisted in designing some of the instrumentation and many other Sandia organizations and personnel contributed to the expedition.

Experimenters and equipment aboard the Sandia aircraft include N. C. Anderholm (5623) with an infra-red radiometer; J. G. Moore (NOTS) with a polarimeter and air glow experiment; E. R. Manring (GCA) with a Birefringent photometer; and a infra-red spectrophotometer, an ultra-violet photometer, and a visible photometer for M. M. Robertson. In addition, two Argentinians will conduct an experiment.

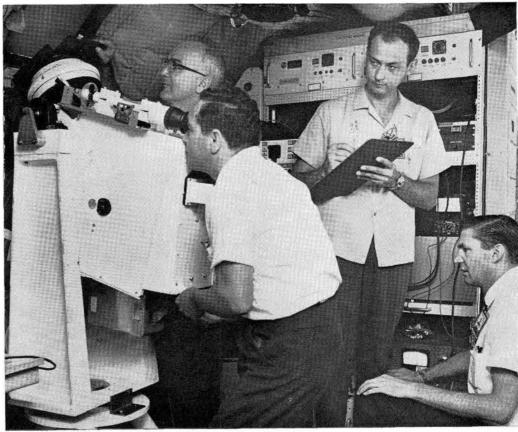
Sandia personnel who will assist in manning the experiments are L. K. Porter (9233); J. J. Kuruzovich (9232); J. E. Barsic, J. E. Truskowski, P. D. Stang, B. R. Stanton, L. C. Harris, R. W. Martin, A. D. Sayers, L. D. Gillette, H. F. Ward, M. C. Frettem (all 7255); D. L. Fastle, D. E. Lee (both 7224), and D. A. Greenwoll (7222).

Alternates are L. W. Paulson and E. C. Saxton (both 7226), R. P. Kelly (2554), R. G. Vigil (7222), W. B. Pafford (7255), and W. R. Geck (3462). M. T. Mattison (7222), and J. T. Wright and G. S. Worthen (both 7255) will be aboard the LASL aircraft. The Sandia representative aboard the LRL aircraft will be R. E. Hooker

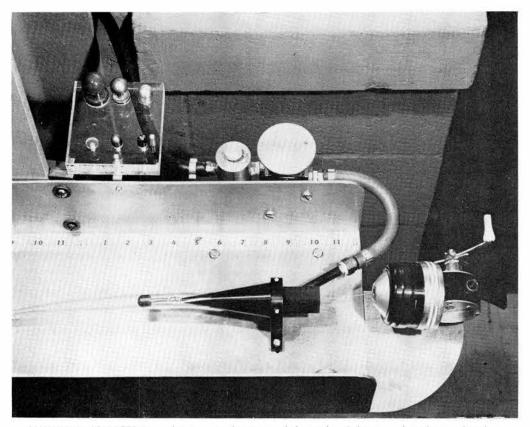


PLACEMENT OF EXPERIMENTS aboard the aircraft is discussed by M. M. Robertson (1122), left, scientific commander of the Sandia expedition, and J. A. Williams (7255), aircraft mission coordinator.

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CHECKING INSTALLATION of the infra-red spectrophotometer experiment aboard the NC-135A aircraft in preparation for the solar eclipse expedition are (I to r) J. J. Kuruzovich (9232), J. S. Llamas (7224), J. E. Barsic (7255), and L. K. Porter (9233). The experiment is designed to gather information on intensity distribution at selected wave lengths in the



ALUMINUM "BULLETS," on the tray in the upper left, and a fishing reel with a nylon line are part of the equipment used in a pneumatic sleeving device developed at Livermore Laboratory. The device enables rapid, "easy" sleeving (encasing) of multi-conductor cables in a vinyl-type tube.

Saves Time, Increases Quality . . .

New Device for Sleeving Cables Designed at Livermore by L. F. Daniel

A bullet is shot (pneumatically) through a tube. Attached to the bullet is a nylon string. You take the string off the bullet and attach the string to a heavier cord—a pull cord. Then, using a fishing reel you draw the string and cord back through the tube. On the far end of the cord are some cables. You anchor the near end of the cord, go to the far end, and draw the tube up the cord and over the cables.

Presto! You've got multi-conductor cables encased in a vinyl-type sleeve (tube).

Sounds simple. Effective and efficient procedures usually are—once they're developed

This procedure was developed by L. F. (Dan) Daniel of Electronic Fabrication Section 8223-3.

The old method of "sleeving" cables took about 30 minutes. Dan's method takes about five. With the old method the tubing was slipped over a steel tape and worked-up over the tape and the cables. This was not only hard on the tubing (occasionally causing it to crack), but often created an accordion effect wherein the tubing bunched up like the bellows of an accordion.

"If you've ever tried replacing a drawstring in a bathing suit, you have some idea of what we used to go through," Dan comments.

The sleeving device was built to Dan's design by SCLL's model shop. It consists of an aluminum tapered sleeving fixture which will handle sleevings with inner diameters of from .250 to 1.375 inches; various sizes of aluminum "bullets" to fit the inner diameters of the sleevings; a freespooling closed-faced spinning (fishing) reel; and a 32-foot-long trough in which to perform the sleeving operation.

The ingenious device makes sleeving a breeze and provides cables needed for attaching connectors and for other applications in electronic units.

Champion Little Leaguers Coached by Sandians

A team in the Pleasanton Little League, eight-year-old division, coached by two Livermore Laboratory employees, D. E. Yearout (8156) and D. R. Baker (8127), has finished the season in first place with a record of seven wins, two losses, and a tie. The team, named the Falcons, won its last five games to take the championship.

Russell Yearout and Jeff Baker, sons of the coaches, and Stephen Smith, son of D. E. Smith (8147), were on the team.

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L. F. DANIEL (8223-3) demonstrates pneumatic sleeving aid he designed. The device has reduced the fabrication time of multiconductor cables to a fraction of the time required under the old method.

Livermore Lab 'Cards' Win Softball League Honors in Play-Off Game

Tadao Hisaoka's (8252-5) Cards won the first half of SCLL's intramural softball league's split season with a thrilling 4 to 3 win over Doyle Baker's (8127-1) Giants in a play-off game.

The play-off game was held because the two teams ended the first half of the split-season schedule with identical 6-win and 2-loss records.

"We had a great first half," says Al Wright (8124), league coordinator. "The second half should be even more exciting. The teams are better balanced and the competition is much greater than in past years."

Leading hitters who are vying for the batting average trophy are: Earl Herzog (8154), batting .550; Floyd Kent (8127-1), .533; Joe Lemmon (8254), .524; Roy Pearson (8127), .454; Marlin Pound (8212), .450; and Larry Skenandore (8121), .444.

Vic Ham (8252-5) and Earl Herzog are tied for the home run leadership with two apiece.

According to Al, there are plenty of games left to be played in the second half which gets under way Sept. 6.

Anyone interested in playing should contact him at ext. 2513.

LIVERMORE NEWS

Business Group Names Ferne Saylors 'Woman of the Year'

Ferne Saylors, supervisor of Product Definition Control Section 8253-3, has been selected as Woman of the Year of the Livermore Valley Charter Chapter of the American Business Women's Association. The announcement was made by the Selection Board at a recent dinner meeting of ABWA held at Dublin Ranch.

With her local honor comes the opportunity of representing the chapter at the ABWA national convention in Tulsa, Okla. in October. She will be considered for National Woman of the Year.

Ferne is a charter member and the second president of the chapter, which was organized in December 1964.

Membership Cards in LRL Recreation Association Are Available at Sandia

Yearly activity cards for the Lawrence Radiation Laboratory Recreation Association (RLRA) may now be obtained from Jim Henderson in Employee Benefits Division 8212. Formerly these cards were available only through the LRL Personnel Services Office.

Sandians, as well as LRL employees, are eligible to join the RLRA and may enroll themselves and their families by paying the \$1 annual dues.

Members are entitled to participate in over 30 LRL-sponsored activities in the local area. A list of the activities, including persons to contact for additional information, has been posted on Sandia bulletin boards



AN AWARD FOR PATRIOTIC SERVICE—Employees at Livermore Laboratory have been honored by the U.S. Treasury Department for patriotic service in support of the local U.S. Savings Bonds Program. Presenting the award is Mrs. U.S. Savings Bonds for 1966, Mrs. Joan Berry of Lusk, Wyo. Accepting on behalf of the employees is B. S. Biggs, Vice President 8000.

Welcome Newcomers

July 29 - Aug. 12

CaliforniaWalter J. Ghio, Stockton825Ralph T. Matsumoto, Mountain View825Betty F. Williams, Hayward825

New Machinist Apprenticeship Program Underway at Livermore

With the enrollment of three Sandians, Livermore Laboratory's newly established machinist apprenticeship program is underway.

Selected for the first class under this program are Rodney D. Aguilar (8223-1, formerly 8235-1), Andrew Cardiel, and Vernon R. Ivins (both 8223-1).

The program provides training for young men interested in becoming journeymen machinists. It will be administered by the State of California Joint Apprenticeship Committee.

"We welcome this program because the need for machinists, particularly allaround machinists, is becoming more critical," says John Bryson, supervisor of Model Shop Division 8223.

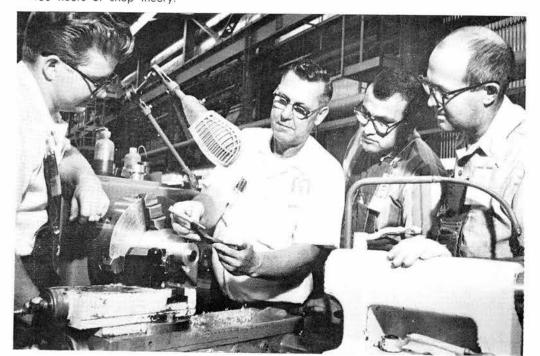
"The apprenticeship program is an excellent way to develop all-around machinists for our model shop and help prepare for future needs," John adds.

The apprenticeship is a tough four-year on-the-job training program, which includes some 144 hours of related classroom instruction in shop theory, math, and other pertinent subject matter. "It isn't easy, that's for sure," John says.

"A young man gives up two evenings a week to attend classes plus the additional time necessary to complete homework assignments."

The novice machinists will be trained on the job in shaping, grinding, turning and boring, milling, bench work, drilling, and special machine operation, as well as inspection, welding, and electronics. "Our graduate machinists will be fortunate in that they will have received training in all phases of model shop operation, which will give them a truly broad machinist background," says Will Miller (8212), SCLL training specialist.

BEGINNING A NEW CAREER—Livermore Laboratory's new apprentice machinists watch intently as (center) Stan Glasky (8223-1), journeyman machinist, demonstrates the use of a micrometer to check progress of a job on the lathe. The apprentices selected for the first class in the new program are (I to r) Rodney Aguilar, Andrew Cardiel, and Vern Ivins (all 8223-1). The four-year program consists of 8000 hours of on-the-job training including 400 hours of shop theory.



YOC Program Ends Second Summer

They came into Sandia Laboratory early last June, 70 of them, a little shy, very polite, and eager to do a good job.

The summer's gone now, and soon our Youth Opportunity Campaign trainees will be gone too.

We'll miss them. They've made a contribution to the Laboratory.

The young women, 22 of them, primarily filling typing and filing positions, met the needs of the office, filled in for vacationing clerical personnel, and took care of the office filing and the accumulated report typing. The 48 young men filled a variety of jobs in drafting, plant maintenance, stockrooms, and laboratories.

Enthusiasm was their key quality. To them, Sandia Laboratory was a vast place filled with busy people doing exciting and important work.

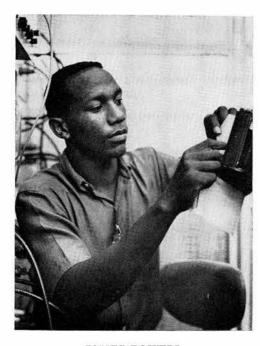
This is the second year that Sandia has participated in President Johnson's Youth Opportunity Campaign which is strongly endorsed and supported by the AEC. In line with the President's suggestion, one trainee was hired for every 100 employees.

Among the goals of the Campaign are the providing of meaningful work and training opportunities for the students.

In addition to the work performed by the students which benefitted the Company and the experiences which benefitted the students by introducing a new environment and by further developing various skills, there was one other important element in the YOC program—the summer's work made it possible for the students to return to school or enter a university.

This was the basic idea of the program, to help them obtain a higher education in exchange for a summer's work which helped the Company.

Typical of the 70 students in the program are the four pictured here. Interviewed last week, they were uniformly sorry to see the summer at Sandia end but were already thinking ahead to next semester at school.



JAMES POWELL

—Invaluable introduction to EE—

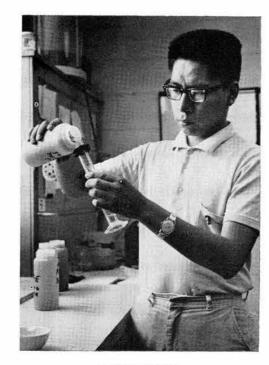
JAMES POWELL assisted in the laboratory of Electro-Optics Division 9232 for the summer, working with some advanced instrumentation under development for various Sandia aerospace and Vela de-

tection projects.

Jim will be enrolling on an academic scholarship at the University of New Mexico in September as an electrical engineering student. For him, the summer was an invaluable introduction to the field.

Jim graduated from Albuquerque High School last June with a number of honors—president of the school's chapter of the National Honor Society, student council representative, president of his home room, a football letterman, and a member of the Albuquerque Tutorial Council which helped teach grade school pupils at Canyoncito last year.

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RALPH NIETO

San Juan Hawk's pitcher

RALPH NIETO worked as a helper in the steam plant this summer performing general maintenance and giving assistance to the men of Mechanical Systems Section 4511-2.

Ralph will return next month to Haskell Institute, a federal trade school operated for American Indians, where he will be a senior in the machinists program. He has maintained a 3.0 average and is looking forward to graduation. He is active in sports at Haskell and has lettered in football and tennis. He is pitching and playing first base for the San Juan Hawks in the summer league.

Although born in Acoma, he is living with relatives at Santo Domingo Pueblo, and commuting to Sandia.



MARY ANN ROMERO

Can devote full time to UNM

MARY ANN ROMERO has worked in Public Relations Department 3430 for the summer filling in for a few weeks for vacationing secretaries, but the long haul has been spent working in Information Research Division 3434. She has typed innumerable Sandia project reference cards.

Mary Ann will return to UNM as a second semester sophomore majoring in elementary education. In the past, during her school terms, she has held a full time job as a waitress for an Old Town restaurant. With what she has earned this summer, she feels that she will be able to devote full time to her course work.

This is the second summer Mary Ann has spent at Sandia and she's enjoyed it and learned much, but the people she's met have meant the most to her. "Everyone is so helpful," she says, "and they've given me encouragement to finish school."

PHYLLIS SCHUBERT has worked in Sandia Security for the summer, primarily in the badge office. She has typed forms, filed information cards, and assembled badges. She will be entering UNM as a freshman with an academic scholarship. She graduated from St. Pius X High School last June.

Highpoint of Phyllis' summer was being a model in a style show sponsored by the Panhellenic Council as an event to raise money for student scholarships. Other interests include guitar playing and cheerleading.

Phyllis has ambitions to become a science teacher but would also like to take a year out and work as an airline hostess.



PHYLLIS SCHUBERT

—Ambition to teach science—

Events Calendar

Aug. 26-28—"Picnic," Old Town Studio, 1208 Rio Grande NW. Reservations, tel. 242-4602.

Aug. 26-Oct. 16—1966 New Mexico Craftsmen's Exhibition, Museum of International Folk Art, Santa Fe.

Aug. 26—"Cinderella" and Aug. 27, "Rigoletto," Santa Fe Opera.

Aug. 27—Jemez Falls, New Mexico Mountain Club, leader George Andrews, tel. 256-1784.

Sept. 1-11—"Absence of a Cello," Albuquerque Little Theatre, 224 San Pasquale SW.

Sept. 3-5—Durango-Silverton tour. YWCA, tel. 247-8841.

Sept. 3-5—Climb Mt. Sneffles and other peaks in San Juan range of southwestern Colorado. New Mexico Mountain Club, leader Jack Kutz, tel. 255-9781.

Sept. 3-5—Santa Fe Fiesta.

Supervisory Appointment



DONALDC.
BEARD to supervisor of Plastics Lab
Section 8134-1, Materials Application
Division II, effective Aug. 16.

Don joined Sandia at Livermore in March 1958 as a staff assistant and has been assigned

in the materials organization the entire time. For the first four years, he worked primarily with laminates and reinforced plastics; and since then, he has been concerned largely with foam and honeycomb materials.

Before coming to Sandia, Don was employed for three and a half years by a subsidiary of Librascope, Inc., as an engineering assistant in high speed camera work, and for four years by California Research and Development Company where he was involved in high vacuum research.

Don has taken courses in mathematics and chemistry at City College of San Francisco.

During World War II, he served four years with the U.S. Army mostly in the Pacific.

Retiring



Going to the World Series is the first of several retirement activities for Lawrence E. Stone of Project Assembly & Heat Treat Section 4221-2. He will retire Aug. 31 after 14½ years at Sandia Laboratory.

Mr. Stone worked in the machine shop when he first joined the Company, and then worked five years in the assembly shop before assuming his present job as shop clerk.

"I'm rooting for Detroit to make the World Series, but I don't know if they can do it," Mr. Stone says. He attended many Series games during the 20 years he worked as a toolmaker in Detroit.

In 1949, he and his wife, Marie (3415-3). decided to move to Phoenix. En route they stopped in Albuquerque for a few days, then on to Phoenix. It was just too hot there so they returned to Albuquerque and have been happy about their decision to settle here. Their home is at 2725 Alcazar NE.

In December, Mr. and Mrs. Stone plan to vacation in Hawaii. "After I get home, I've got a lot of things to do," he says. "I want to do some volunteer work with young boys. I've always enjoyed working with young people and I'm going to look around to see where I might be of service."

Take Note

Explorer Scout Post 296 is seeking new members, according to Leon Day (7215). Leon is a member of the Amateur Radio Caravan Club which sponsors the post. Program emphasis is placed on electronics and communications, in addition to regular scouting activities. Radio theory and code classes are scheduled along with field exercises. Boys 14 and older are eligible for membership. Call Leon, tel. 256-6360, for additional information.

Environmental Testing 7300 personnel who work in Area I play "slow pitch" softball. Their co-workers who operate the environmental testing facilities in Area III prefer "fast pitch" softball. "Fast pitch softball is twice the game, etc., etc.," the men in Area III told the men in Area I. One thing led to another until a game was arranged.

First four innings were played slow pitch style. Second four innings were played fast pitch. In the last inning, with the score tied 8-8, Jim Clark (7322) of the slow pitch team bunted and made it to first. The toss to second went wild and Jim made it all the way around for a homerum off a bunt. The slow pitch team won 9-8. Naturally, Area III was robbed.

The 2100-4600-4100-9400 team emerged

champions of the Sandia Fast Pitch league. League record was 18 won, 5 lost. Members of the team are manager R. K. Bump (2131), F. P. Freemon (2131), R. R. Balthaser (2131), R. A. Hanson (2134), R. A. Swanigan (2134), Leo Chavez (4611), J. M. Costales (4615), F. C. Comiskey (4153), L. G. Sisneros (4135), R. G. Bleyenberg (2133), R. P. Bailey (2114), E. R. Clark (2112), and A. L. Naedeman (9423).

Tom Covert (2234) and John Olsen (2225) tied for top prizes during a recent 2200 golf tournament. Some 52 employees participated in the tourney played at Los Altos. Both men shot a 72 with handicaps.

Sandia Laboratory Slow Pitch League champs are 1300-2100-7200-AEC team members. The team won 13, lost 3 to take the league crown. Team members are manager Cliff Kinabrew (7244), assistant manager Frank Murray (AEC), Art Arthur (7246), Sid Williams (7244), Jim Lohkamp (7246), Clarence Washington (7245), Len Kracko (7246), Mal Fisher (7244), Bob Rutter (7246), Dean Thornbrough (7268), Rex Elder (1333), Al Disch (1333), Dick Yactor (1333), Joe Saya (2122), and Dwight Lewis, Al Cox, Joe Lagrone, Ted Marquess, Steve Taylor, and Roger Sargent (all AEC).

Service Awards













F. J. Villa 2546

1. Limit: 20 words





D. W. Dufty 4252





R. T. Miller 4573



H. E. Walker 2151



L. J. Witt 9222

15 Years









J. T. Grier, Jr. 4212



D. A. Mayhew 7255





Connie Taylor 7212



10 Years

Aug. 26 - Sept. 8

Aug. 26 - Sept. 8

C. P. Stanton 1432. Julio Pardo 2541, J. A. Garcia 4252, J. J. Kuruzovich 9232, J. E. Magruder 3341, W. A. Grace 4631, L. F. Dyer 7336, J. R. Ingram 4231, R. L. Dalby 4233. M. D. Perkins 1334, W. J. Lutgen 2211, F. S. Himebrook 2541, Willa L. Urbanoski 4131, M. B. Leeman 7212, J. H. Shelby 4252, M. G. Young 2121, J. O. Travis 2432. J. B. Hamlet 4113, P. Trujillo 4518, G. L. Scholer 8134, T. V. Harroun 9212, G. R. Tilley 9233, E. T. Schreiner 2545, A. V. McFarland 2551, R. E. Smith 9311, and D. Q. Matejka 9324.

Tech Papers Given At Mexico City Meet

Technical papers by several Sandians will be presented in Mexico City Aug. 29-31 during a joint meeting of the American Physical Society, Sociedad Mexicana de Fisica, and the Canadian Association of Physicists.

A total of 415 papers will be given by scientists of the three countries - about twice the number presented when the meeting was last held in Mexico in 1961. The 1965 meeting was in Honolulu, Hawaii.

Primary interest will be in cosmic ray physics, with secondary stress on atomic particle physics. The second annual Tom W. Bonner prize will be awarded R. J. Van de Graaff for his contributions to and continued development of the electrostatic accelerator.

The Sandians who will attend the meeting and the papers they will present are:

M. M. Robertson (1122), "Hyperfine Structure in the Arc Spectrum of Argon

G. C. Smith (5213), "Triplet Phosphorescence in Crystalline Anthracene."
G. L. Cano (5241), "Range and Total

Ionization of Low-Energy Recoil Ions from Alpha Disintegrations in Pure and Binary

R. C. Wayne (5132), with co-author D. H. Anderson (5132), "Pressure Dependence of the Morin Transition in Alpha-Fe203, and with co-author R. M. Cotts of Cornell University, "Nuclear-Magnetic-Resonance Measurements of Self-Diffusion in Noninfinite Media."

C. J. MacCallum (5231), "Electron Penetration in Solids," and with co-author H. S. Levine (5234), "A Solvable Model of Oxide Film Growth in Metals."

Sandia Speakers H. H. Wicke (5261), "The Non-Preserva-

tion of Cech-Completeness by an Open Continuous Mapping Between Collectionwise Normal T1-Spaces. Preliminary Report," American Mathematical Society, Aug. 29-Sept. 2, New Brunswick, N. J.

J. J. Deely (5263), "Sequential Selection of the Best of k Populations," annual meeting of the Institute of Mathematical Statistics, Aug. 30-Sept. 2, Rutgers Uni-

Deaths - - -



Truman T. Gillett, an administrative assistant in Military Manuals Division 7523, died Aug. 10 following surgery. He was 54.

He had been employed at Sandia Laboratory 18 years.

He is survived by

his widow and three brothers.



Walter C. Hunter, manager of Measurement Standards Development Department 2410, died Aug. 10 after a long illness. He was 53.

He came to Sandia in 1952 on loan from Bell Tele phone Laboratories which he joined in

1944. He headed divisions in Standards and Reactor Research before assuming his most recent position in April 1963.

He is survived by his widow and a married daughter.



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Florence Minin, a teletypewriter operator in Communications Operations Section 3416-1, died unexpectedly Aug. 20. She was 47. She had been employed at Sandia since May 1961 and was a steward for the Office and profession-

al Employees International Union.

Survivors include her husband, Albert Minin, a daughter, two sons, three grandchildren, and a sister.

SHOPPING CENTER

SHOPPING CENTER

SHOPPING CENTER

5-BDR. HOUSE, den, garage, near Sandia Base and all schools. Lujan, 265-6551.

54 FORD V8 2-dr. sedan, new 36 mo. battery w/Sears' guarantee, \$85. Espenshade, 299-1331.
 TWO GERMAN-MADE 3/4 size violins w/music stands and books, bows recently restrung, \$45/ea. Detorie, 299-1868 after 5.

BED, dresser, and mirror; lamp table sofa; 2 matched living room chairs. May, 299-2624.

LUGER 9mm automatic, \$55; Ruger .22 Frontier revolver, new, \$55; trade for old hunting kn:ves. Smitha, 299-1096.

WARD'S TENT TRAILER, orig. cost \$390, sell for \$200 (includes spare tire), sleeps 5. Cowham, 298-4249 after 5.

KODAK daylight loading developing tank, 35mm, \$7.50 or trade for other photographic equipment. Marker, 296-1229.

POLAROID LAND CAMERA, J-33, electric eye, flash attachment, leather carrying case, \$25.

3-BDR., built-ins, carpeted, garage, AC, cfa heat, \$250 down on REC or rent \$105/mo., 633 Claudine NE. Saviteer, 296-3750.

TRAMPOLINE, 5x10' bed, Fenner-Hamilton gym master model, \$50. Esterly, 256-9251.

DRESSING TABLE, includes padded bench and 40x40" mirror, cost \$80, sell for \$27.50. Nichols, 247-2564.

DOUBLE BED, solid maple footboard, sides and hookcase headboard, w/innersprings and mattress, \$90; maple finish crickett chair, \$10. Church, 299-2175.

REFRIGERATOR, auto. defrost, \$40; TV, portable 19" Silvertone, \$55; maple kitchen set w/six skirted chairs, yellow and brown plaid, \$70. Wall, 298-8972.

USED GAS RANGE, \$25 or best offer. Murphy, 256-1130.

10 ACRES, 13 miles south in Manzanos, all or in $2\frac{1}{2}$ acre lots, \$500/acre cash, Sandia neighbors. Christopher, 296-1259.

3-BDR., carpeted, drapes, sprinklers, landscaped, AC, forced air heating, patio, dbl. garage, near churches and schools. Bray, 255-5009.

JEEP-55 station wagon. 4-wd. hubs, w/Ford six engine, \$625. Cranfill, 298-3194.

'63 VESPA 150cc motor scooter, \$200; Wright auto air cooler, 12 volt, \$10; set of 4 Baby Moon hub caps, \$5. Gluvna, 299-8027.

FIVE-MAN Army tent. Wilson, 282-3225. FORD TRACTOR "2000" industrial, back blade, hydraulic front loader, \$2800. Reck, 544-4123 after 5:50.

'64 FALCON, two-door, sports coupe. Blain, 298-9262 after 5:30.

REFRIGERATOR, Westinghouse, top freezer and refrig. combination, \$45, 6 mos. guarantee; Thor Gladiron mangle, \$15; boy's 26" bicycle, \$12. Adams, 256-7265.

Adams, 256-7265.

RUGER single six, holster, .22, \$40; 7.65 Mauser sling, \$15. Schowers, 255-9279. '65 HARLEY Sportster XLCH, 3000 miles, \$1200. Parry, 299-2749.

nammons, 296-1142.

SIMMONS hide-a-bed; 9x12 Lee carpet w/pad; 2 blue butterfly patio chairs; chaise lounge; 6-yr. crib; 31/4 HP Clinton mower; tire chains-8:00-14, 7:10-15, misc. Laumbach, 298-4917.

PATIO SALE: Saturday/Sunday, kitchen appliances, glassware, trans. radio, rollaway bed, etc. Farrell, 265-4627.

YOUTH BED, white, w/mattress, \$6.50; tricycle, \$3.50. Matlock, 256-7371 evenings.

'65 VOLKSWAGEN station wagon, Variant 1500S, 1228 Muriel St. NE. Burright.

FREE KITTENS, three females, Webb, 298-8139.

3-BDR, MANKIN, NE heights, near schools, shop-ping and bases, low down, low monthly pay-ments, 1435 Espejo NE. Haynes, 298-6551.

AQUARIUM, 5-gal. complete, pump, filter, thermostat, light, fish, etc., \$16; fancy guppies 5-10 cents; 20" boy's Schwinn bike, \$7. Eagan, 298-0196. '65 TR-4-A independent rear suspension convertible

SOUSAPHONE E-flat base 4 valve, special Holton Gold Bell w/case, sell or trade for 120 base accordion. Johnson, 344-9369.

21" MAPLE TV; violin; gold decorated pillows on wheels; boy's sport coat, slacks, Cub Scout uni-form—size 10; maternity clothes, sizes 12 and 14. Caudle, 298-9120.

'61 F85 wagon, R&H, AT, PS, \$650. Smith, 298-4974.

3-BDR. ROBERSON, 13/4 bath, family-dining rm. w/fp., heated garage, AC. drapes, wardrobe closets, sprinklers, near shops-schools, 9624 Shoshone NE. Leeman, 299-9149.

'59 FORD 4-dr., AC, PS, recently overhauled, \$475. Denney, 268-0004.

ACCORDION, 120-bass, full-size, w/music stand and case, \$125. Hodyke, 268-5210.

REMINGTON portable typewriter, \$20; infant's wicker dressing table, \$12.50; round mirror, 26" diameter, \$7.50. Anderholm, 255-6835.

'62 CORVAIR SPYDER, 150HP turbo super-charged, 4-spd. stick, buckets, \$783. Coalson, 298-8074.

SHOPPING CENTER

'63 CHEV BEL-AIR, 4-dr., 6-cyl., standard trans., R&H. Linnerooth, 299-6154.

FOOTBALL SHOES, Rawlins high top, size 8½, fits street shoe 9-11, new, \$9.95. Reynolds, 299-5157.

'63 CADILLAC Coupe de Ville, new engine, new tires, new exhaust system and rebuilt transmission, all power, 309 Gen. Somervell NE. Laube, 200, 2017

NAUGAHIDE covered Western-styled sofa, chair, w/matching coffee table, 2 end tables, \$50. Sundberg, 299-2177.

BABY BED, \$10; youth saddle, \$20; 15" 3/4 rig, rawhide tree saddle, \$40. Bassett, 898-1840.

GO-CART, used, 3½ph motor, slightly out of line, \$40. Keith, 298-7134.

3-BDR. MOSSMAN, available immediately, drapes, rugs, landscaped, fireplace, built-ins, near Coranado, take over GI loan or refinance \$17,000. Keith, 298-7134.

CAR TOP luggage carrier, 60x42x14, zipper opening, used once, \$20. Ostlund, 255-6493.

SAVAGE 24C-DL .22-20 ga. mag. over and under. \$43; AYA Matador dbl. barrel shotgun, selective trigger and exectors, 12 ga., \$95. Klett, 344-9021.

KITTENS, calico "patches" and black and white "boots", housebroken, friendly. Swain, 265-0098.

TOY POODLE puppy, AKC, female, show quality. Shipley, 298-2433. BASSET HOUND pups, AKC registered. Weidner,

DRAPES, three pair: two pair short w/white background w/gold and aqua print, one pair short dark green. Bartlett, 299-4861.

'66 YAMAHA, oil injection, 80cc, 140 mpg, \$279. Barton, 298-1240. FLEXSTEEL 2-piece sectional, green; blond end table; lamp; floor length drapes; adjustable drapery rod. Marrs, 299-3865.

20" FIBERGLASS CABIN CRUISER, 2-75HP Evinrude engines, custom Chattin tandem trailer. Sutton, 265-8964.

'59 FORD pickup, ½-ton, w/bed, 4-spd, new t.res, \$450, 5500 Arvilla NE, Stronach.

PLATE GLASS sliding door, 4'8'' x 6'10'' complete w/metal frame and all hardware, \$40; extension table w/six 15'' leaves, seats 12, \$75; foam rubber couch, \$25. Fortman, 256-2105.

BABY SITTING in my home, part or full time, NE Heights area, walled yard, only mins. from Base. Orth, 296-3236.

PROJECTOR for 35mm slides, reasonably priced semi- or automatic in good condition. Adams. 256-7265.

CARPOOL MEMBERS, two man car pool would like additional members from Monterrey Manor to 880. Kotoski, 298-1732.

MALE BEAGLE PUP. Zamora, 243-7107.

RIDE from vicinity of 1000 block of California SE to Bldg. 892. Stromberg, 255-6131.

FOR RENT

3-BDR., 2 bath, mountain home on 20 acres, east of Sandias, will lease \$125/mo. Case, 282-3698. HOME for rent, completely furnished, ideal for small family or single males, immediate occupancy, near Los Altos, Grant Schools. Maciloek. cy, near 299-1696.

UNFURNISHED 2-bdr. house, AC, stove, refrig ator, washer rough-in, dryer outlet, walled ba yard, NE Heights. Silva, 255-8881 after 5.

PLACITAS, large, remodeled old adobe, all utilities available, garage, trees, fruit, spring water, corral. Illing, 299-7378.

LOST AND FOUND

LOST—Prescription glasses w/brown aluminum frames, glasses w/very dark lens, several keys on ring w/no identification. Zippo brass finish cigarette lighter, white No. 10 knitting needle. micrometer, key w/magnetic apparatus, small stainless steel knife, brown billfold. LOST AND FOUND, tel. 264-2757, Bldg. 610.

FOUND—Keys w/black tag and letters M. G., keys on small wire ring, man's Wakmann watch, sun-glasses w/black frames. LOST AND FOUND, tel. 264-2757, Bldg. 610.

WANTED

GOOD home for well-trained, housebroken, male cat. no small children. Rappleyea, 299-6638.

Orth, 296-3236.

SOUTH VALLEY CAR POOL needs driver-riders from Adobe Acres or vicinity Rio Bravo and Isleta to bidgs. 805-806-802, etc. Looby, 877-2742.

HONDA, Yamaha, or Suzuki motorcycle, 50 to 90 cc. Weber, 299-1389.

WILL TRADE equity in 2-bdr. house, Princess Jeanne area, for good size house trailer. Chapman. 298-4733 or 299-1721.

RIDE from Eastridge Dr. NE (east of Juan Tabo) to bldg. 836. Sisson. 299-7133.

TRADE one 26" boy's bicycle for one 24" boy's bicycle. Gutscher, 298-6563.

SCUBA DIVING equipment, tank and regulator in A-1 condition. Ingram, 344-5756 after 5.

AND near Navaio Lake or Vallecito Reserv Stone, 298-4620.

MODERN, furnished Sandia Mt. cottage, insulated, suitable for 1 or 2, water and butane paid, carport, 20 min. from Sandia, available about Sept. 5. McMillin, 282-3226.

REDECORATED, ready for lease, 3-bdr, home in NE Heights, \$120 mo. unfurnished. Akin, 299-4242 evenings.

3-BDR HOUSE, carpet, pitched roof landscaped, walled yard, garage, furnished, \$120, unfurnished \$110, 921 Tomasita NE. Berger, 296-4587.

Limit: 20 words One ad per issue per person Must be submitted in writing Use home telephone numbers For Sandia Corporation and AEC employees only No commercial ads, please Include name and organization Housing listed here for rent or sale is available for occupancy without regard to race, creed, color, or national origin. FOR SALE

CLASSIFIED ADVERTISING Deadline: Friday noon prior to week of publication unless changed by holiday.

A maximum of 125 ads will be accepted for each issue.

RULES

'66 CHEV. II Super Sport, 4-spd., total \$2695. Garcia, 877-4264. HEATHKIT DX-100 transmitter, \$50. James, 255-8429. CELLO, full size, new case, \$175; Kenmore 3-cycle washer, major overhaul in 1964, \$25. Hahn, 268-5475.

STERLING SILVERWARE: four-piece service for twelve plus serving pieces in "Rambler Rose" by Towle, most pieces never been used. Talley, 344-6838 after 5. 15,950, \$102/mo., 3-bdr., 2 baths, entry hall, laundry rm., AC, built-ins, carport, landscaped, fenced, patio, near school-shopping center. Russo, 255-4092 after 5.

CHAIRS: one pair apricot colored, modern or pro-vincial style, both for \$60. McKinley, 268-4779

ROBERSON 3-bdr., 13/4 bath, family rm., new carpet and drapes, AC. fp., dbl. garage, land-scaped, \$14,500, 5725 Paradise Blvd. NW. Kull, 898-2263. '62 CHEVY II, \$600 or \$250 and assume monthly payments, balance \$375. Gonzales, 877-9491.

FILTER for swimming pool, \$15; '54-56 Oldsmobile parts; 39" bed frame; steel shelves 6' wide, 7' high, 2' deep, heavy duty. Villella, 298-7955.

wide, 7' h 298-7955. VIOLIN w/case, intermediate student's, \$50. Gregory, 299-2461.

CLOSET DOORS. 271/2"x791/2" and 233/4"x80". \$3/ea.; military ammo. 30-06, cartons of 20, \$1.50/ea. Alvino. 255-6339. VIOLIN, beginner's 3/4 size, Koltisch shoulder rest, case, \$50. Savage, 256-7263 after 5.

3-SPEED, heavy duty, Exercisor belt and stand, cost \$139.95, sell for \$75. Kraft, 299-1278 after 5. '59 TRI-PACER, fresh annual, 550 hrs., S.M.O.H., Ceconite covered wings, \$3900; radio, stereo, 21" TV console, \$125. Breckenridge, 298-0042.

LUDWIG marching drum w/cover, sticks, and music stand; 20 ga. bolt action shotgun. Hunnicutt, 299-2932. '65 TRIUMPH T100S.C. motorcycle, make offer, 2241 Alvarado NE. Lovato, 242-0332.

DEL-REY electric quitar: tone/volume controls, 6 strings, case; Airline amplifier: 12'' Jensen speaker, inputs and controls, \$97.50 Lumpkin. 299-9179. '62 CHEVY II 100 4-dr., tan; '62 Monza 900, 4 on floor, convertible, black/white top. Dunn, 255-9213.

MINIBIKE, 38" wheel base, equipped w/Mc-Collough 45 engine (new), all safety features operable. O'Neill, 255-6355.

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ANTIQUES: English level, oil lamps, 18" wooden crucifix, edition of N. M. Law (in Spanish), hand made bell, ironstone plattere, brass bed, etc. Jolly, 6040 Appleton Rd. SW, 877-2474.

MOTORCYCLE, 125cc Sachs J-B, good for street or conversion to trail. Miller, 255-6838. 44 MAGNUM CARBINE Ruger semi-automatic, will throw in 20 bullets; dinette set, three chairs. Apodaca, 298-1288 after 5.

POOR-MAN'S JEEP, converted '49 Chev. pickup, 4-spd., 5 passenger, junk box. Gustafson, 243-3690.

'46 CHEVROLET Club Coupe, new Firestone tires put on 2 weeks ago, \$150. Klentschy, 255-3795 after 4.

Ashworth, 296-2855.

GE IRONER, \$35: Coldspot refrigerator \$55: push lawn mower, \$6: rollaway bed, \$10: Magnus or-gan, \$20; boy's 26" bicycle, \$18. Stathis, 268-4037.

TORO power lawn mower, 18" rotary, B&S 2½ HP engine, rear grass eject, wind rope start, \$15. Taylor, 256-2837.

LIGHT SOLID OAK bookcase, 44"w x 48"h x 11" deep, \$8; L-shaped kitchen countertop, beine w/gold flake, 118" L, w/sink cut out, \$20. Trump, 299-5162.

MOTORCYCLE, '61, 500cc R50 B.M.W. w/R50S cam shaft, \$750. O'Meara, 299-1080.

SHOPPING CENTER

'61 JEEP WAGON, 4wd, turn out hubs. R&H, 30,000 miles, shorter wheel base than Wagoneer. Hammons, 296-1142.

white, red leather interior, wire wheels, never raced, one owner, below book. Bagg, 898-2539.

'63 CADILLAC Coupe de Ville, air, all power, low mileage, new tires. Archuleta, 247-2527.

SONY PORTABLE 5" TV, including luggage type carrying case, auxiliary battery pack, charger, automobile installation accessories, \$100. Laskar, 299-1024.

'57 FORD 4-dr. sedan, V-8, AT, PB, PS, elect. windows and seat, seat belts, \$250. Hagins, 298-9303.

NORGE electric range, \$30; 2 matching twin beds, \$50. Guy, 298-6408.

AKC registered black miniature poodle puppy, fe-male, 3 mos. old, excellent pedigree, has had shots; boy's English bicycle, racer, 10-spd. Schafer, 299-4634 after 4:30.

10' TRAVEL QUEEN CAMPER w/portolet and furnace; '66 3/4-ton Ford pickup, camper special, 8,000 miles. Rice, 299-6736.

VALVE STEM SEALS for 6-cyl. overhead valve engine; stops oil loss thru guides, \$3.95. Baxter, 344-7601.

R&H. Linnerooth, 299-6.154.

'59 SIMCA, recent overhaul and new brakes. \$275 or make offer. Turnbough, 299-3631.

FRIGIDAIRE apt. size refrigerator, \$25; women's bicycle, \$10; 7.65 German Mauser, \$25. Kupper, 298-7720.

'47 PLYMOUTH, 4-dr. sedan, radio, 75,200 actual miles, \$95. Lynes, 268-0144.

WINCHESTER Centennial 1866-1966 anniversary model 30-30, gold plated, shot only 20 times; '60 Corvette. Moore, 268-1683 after 5.

ENGLISH springer spaniel puppies, registered pure-bred; '54 DeSoto station wagon, \$50. Barth, 345-0172.

COLLIE CROSS puppies, free to good home; 45,000 BTU dual floor furnace w/thermostat controls. Tolbert, 282-3438.



THE HARD WAY — Odds are that Coronado Club members Elaine and Bob Blair will make it to the Las Vegas Night event at the Club by tomorrow evening. Wheeling and dealing starts at 8 p.m. and western dancing will be featured from 9 to 1. Admission is \$1 for members, \$2 for guests, wooden Indians excepted.

Coronado Club Activities

Water Carnival, Las Vegas Night Set at Coronado Club Tomorrow

Annual Coronado Club Water Carnival opens the weekend action at the Coronado Club at 1 p.m. Saturday. It will be a great day for the kids—last weekend before school opens—and the twin Coronado Club pools will be the scene for water relays, races, fun, and games. Events are scheduled for all age groups and the event is free to Club members.

A western atmosphere will prevail later in the evening at the Club when Las Vegas Night opens at 8 p.m. Door prize will be an expense-paid stay for two at the Hacienda Hotel in Las Vegas. Other prizes will go to the 16 big winners.

The Estancia Valley Boys will be on hand for dancing from 9 to 1 and sandwiches will be served. Cost to members is \$1, guests \$2. No reservations needed.

Speaking of Las Vegas, the Club has arranged a weekend in Las Vegas at a special price. Travel, two nights at the Hacienda Hotel, meals, and entertainment at a package price of \$74.25 per person. The trip is set for Oct. 14 and reservations must be made at the Club office by Sept. 5.

With school back in session, teen dances are switched to Saturday night. On Sept. 10, a group called the "Eternal Nothings" will play for an other-worldly teenage go go. The blastoff is at 7:30 p.m., and the place will orbit until 10:30. Admission is 25 cents per body.

The Coronado Club will repeat its popular dance instruction courses with another 10-week series beginning Sept. 12. Classes will be held on Monday evenings—beginners from 7 until 8:30 p.m. and advanced dancers from 8:30 until 10. Both Latin and American dances will be taught. Enrollment is \$20 per couple. Registration is at the Club office any time prior to the first class meeting.

It is not too early to think about football season. The fact that the Coronado Club will again charter buses to run from the Club to University Stadium for the Lobo home games might influence a decision for season's tickets. The buses will depart from the Club one hour before game time and return right after the game. Bus fare will be 50 cents for the round trip.

Social Hour

Tonight the Lamplighters will be on the bandstand and the seafood buffet will be the featured spread. The buffet is \$1.25 for adults, \$1 for kids.

On Friday, Sept. 2, Tommy Kelly will provide the happy music and the chuckwagon roast beef and shrimp buffet will be

served. Cost goes to \$1.75 for adults, \$1.50 for children.

On Friday, Sept. 9, Bud Fisher's group will make the music and the Mexican buffet will be served.

Bridge

Duplicate bridge meets at 7 p.m. Monday, Sept. 12. A dinner precedes the event. ACF bridge meets at 7 p.m. Wednesday, Sept. 7.

Bowling

The Junior Bowling League starts on Saturday, Sept. 17 at Lomas Bowl. Any youngster age 8 through 15 is eligible for the league if his parents are members of the Club. Call Norm Eriksen at 298-2122 for registration information.

All Coronado Club members interested in bowling in women's, men's, or mixed double leagues are invited to contact Ken Carmichael (4135), phone 299-4368. Two two-couple teams are needed to complete a 12-team mixed league at San Mateo Lanes playing Wednesdays at 6:30 p.m.

The Coronado Club will conduct a combined individual men and women's handicap bowling tournament at Lomas Bowl Saturday, Sept. 10. Trophies and cash awards will go to top winners. To participate or for additional information, call Betty Schroeder, 296-2925, or the Club office.

Data Exchange Plan Saves Time, Pares Cost of Conducting Tests

A \$3 million cost savings was realized in 1965 by participants in the Inter-service Data Exchange Program (IDEP).

About one third of the 164 participating firms have submitted reports on the program. They state that the cost savings was due to the use of IDEP reports which either shortened or eliminated the necessity of conducting their own evaluation tests on component parts.

The space systems division of one participating company, for example, reported a savings of over \$926,000. The data obtained through the IDEP system enabled them to eliminate 142 tests and shorten 74 other tests.

"These reported savings are an indication of IDEP's value to Sandia and the other IDEP participants," says Walt Westman, supervisor of Test Systems Design Practices Division 2224 and Sandia IDEP Data Coordinator.

IDEP is designed to avoid duplication of costly tests of commercially available items used in government programs. Most of the 164 participating companies are prime or major sub-contractors engaged in missile,

Welcome Newcomers

Aug. 8-19

Albuquerque

Paul E. Brewer, Jr.	3122
Dolores C. Chavez	4135
Danny L. Cobb	3415
Margaret C. Craig	3412
Orville E. Furrow	4574
Vernon L. Havo	4114
Robert G. Hostetter	2211
Luciano H. Mora, Jr.	4574
Emiliano Sanchez, Jr.	457
Grace E. Sanchez	4613
Grace E. Sanchez	2415
John J. Strascina	457
Sylvester C. Tafoya	9016
Edith A. Wallace	2104
Louise S. Winner	3120
John R. Neighbours, Monterrey	5151
Connecticut	
Melvin R. Scott, Manchester	5223
Kansas	23200
Robert L. Davis, Leavenworth	7343
Fred P. Franklin, Merriam	5214
William R. Leuenberger, Lawrence	1322
Missouri	
*Donald E. Amos, Columbia	5262
South Carolina	
Vernon L. Duke, Greeneville	454
Wki	
Larry D. Berthols, Pullman	1116
*Denotes rehired.	
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Back Injury Breaks Sandia Safety Record

An employee suffered a disabling injury on Aug. 1 when he injured his back by carrying containers weighing more than his weight-lifting restriction.

The employee, who is on a permanent 25-pound weight-lifting restriction, was asked to help carry 10 five-gallon containers from the storeroom to the front door of a building. He proceeded to carry all of the cans, two at a time, down three steps to the door. Individual weights of the containers ranged from 12 to 49 pounds.

After moving the containers, he sat down for a while. When getting up from the chair, he felt a sharp pain in his back. Following recommended bed rest at home, he returned to work on Aug. 8.

At the time of the accident, Sandia's safety record had reached 18 days, or 630,-000 man hours worked without a lost time injury.

etty Schroeder, 296-2925, or the Club oot man nours worked without a lost time injury.

JUST TEN MORE days of swimming are available this season at the Coronado Club pools. To highlight the end of the season there's a free Water Carnival for Club members tomorrow at 1 p.m. The last day of swimming at the pools is Labor Day, Mon., Sept. 5.

space, and related programs. Like Sandia, the agencies are parts "users" rather than parts manufacturers or vendors.

IDEP exchange system provides a participant, such as Sandia, with the support of 163 other testing groups outside the company.

Sandia has contributed close to 300 reports on component testing, processes, and techniques into the system during the last four years. Sandia's contributions into IDEP totaled 85 reports during fiscal year 1966 and 32 for FY '65.

On the output side of the ledger, approximately 70 percent of the Sandia users reported that they found helpful information in IDEP reports.

Currently there are some 25,000 reports in the system, 24,000 of which are on component test results and the remainder on techniques, materials, and processes.

IDEP reports are broken down into 660 different categories, such as amplifiers, batteries, capacitors, semiconductors, hardware problems in space, etc. Approximately 68 percent of them are on electrical parts; 15 percent on materials, finishes, and hardware; 6 percent on mechanical parts; 6 percent on propulsion parts; and 5 percent are general reports.

The easily retrievable information about any general field as well as complete microfilmed reports or copies of summary sheets are available in the Specifications Library, Rm. 6 of Bldg. 828. General information may also be obtained by dialing 264-IDEP (264-4337). A quarterly listing of all reports is also available to all organizations.

Sandians wishing to survey any or all of the 164 IDEP contractors for information on a specific problem (evaluation, process, technique, etc.) may call Walt Westman at 264-7063. While most of the IDEP reports are unclassified, classified information may also be obtained.

IDEP reporting procedures are also relatively simple. When a Sandia engineer completes his regular test report, he may call Wendell Smith (3413) at 264-3565. Wendell will assist in filling out the IDEP summary sheet which becomes part of the system. IDEP then provides the indexing service and microfilmed copies to all participating companies.

A 20-minute audio-visual presentation describing IDEP is available for showing to any Sandia engineering or testing group. Organizations may call 264-7063 to arrange an IDEP orientation meeting.

L. F. Parman, manager of Technical Libraries Department 3420, is the alternate IDEP Data Coordinator at Sandia. Mrs. Hugh Howe (3421) is in charge of the IDEP depository at the Laboratory.

Sandia's Safety Scoreboard

Sandia Laboratory:
23 DAYS
805,000 MAN HOURS
WITHOUT A
DISABLING INJURY

Livermore Laboratory:
71 DAYS
345,480 MAN HOURS
WITHOUT A
DISABLING INJURY